

Comparability of Soviet and US Statistics

1. "Soviet statistics are neither entirely false nor entirely true". The USSR collects statistical data not merely for propaganda purposes, but to facilitate its economic planning and to control the execution of its economic plans. While it is sometimes to the interest of Soviet factory managers to falsify their statistical reports, it is to the interest of the Soviet central authorities to obtain accurate statistics. Therefore, falsification of reports at lower levels is subject to severe punishment.

2. It is true that the USSR is interested in publishing statistical reports of economic performance, to place itself in a favorable light to the outside world. Close examination of published Soviet statistics, however, has shown that deliberate falsification is the exception rather than the rule.

3. The interpretation of Soviet statistics, however, in common with those of other countries, depends on definitions of the quantities being measured. Sometimes terms are explicitly defined; at other times definitions depend upon customary usage; at other times terms are not defined and the definition must be derived from an examination of the data being measured. For these reasons the statistics of the USSR and the US are not always comparable. Careful economic analysis therefore requires that before comparison is made of the performance of the

economies of the USSR and the US, based on national statistics, that the data be examined for comparability. Where the data are not comparable, it is standard practice amongst careful analysts to identify the differences in manner of measurement and convert the data to a comparable basis.

4. In the following illustrations drawn from Soviet production of machine tools, footwear, and woolen cloth, comparability depends in large part upon the definition of the items being measured. If the US production of machine tools be taken from the reports of the members of the National Machine Tool Builders Association, the figure will exclude the production of non-members, who are estimated to produce about 15 to 25 per cent of the output of the industry. CIA, therefore, bases its estimate of US production on a 15 per cent increase over NMTBA figures. On the other hand the production (shipments) reported by the Census Bureau, include a large number of small tools such as bench-type grinders, excluded from the NMTBA and USSR statistics. CIA estimates that in 1957 Census Bureau estimates included over 34,000 such bench grinders, averaging about \$60 a unit, together with some 10,000 other units not reported as machine tools in Soviet statistics. The USSR compares its machine tool production with US census figures, which places the USSR in second place. Comparison with NMTBA figures places the USSR in first place. CIA, in collecting and making available to US policy makers,

Production of Metalcutting Machine Tools
(in units)

	<u>US</u>		<u>USSR</u>
	<u>NMTBA*</u>	<u>B. of C.**</u>	
1950	41,500	228,580 (minimum)	70,797
1951	70,800	-	71,182
1952	96,800	-	74,558
1953	91,500	-	91,759
1954	58,500	-	102,362
1955	50,500	-	117,087
1956	63,900	-	121,300
1957	53,700	94,400 (minimum)	130,000
1958	27,000***	-	138,000
1959****			145,000
1965****			190,000 - 200,000

* National Machine Tool Builders Association

** Bureau of the Census, Facts for Industry series M35W-07
pamphlets on Machine Tools

*** Preliminary report in October 1958

**** Plan

information on the two industries, seeks to present comparable data, rather than to make a propaganda case for either country.

5. During the period 1952 through 1958, NMSTA reported production of 442,000 units. Estimating a 15% additional output for other producers gives the US an output of 508,000 units, compared to 775,000 for the USSR. In 1952, Soviet production fell below the US on a unit for unit basis, in output, technology, and capacity. In 1958 the USSR output of machine tools technically equivalent to the US models in current production equalled or even exceeded the entire US output.

6. Admittedly these figures measure production and not capacity. Capacity to manufacture machine tools is not reported by the official statistics of either the USSR or the US. Capacity is difficult to estimate and would have little meaning unless it took into account the convertibility of other capital equipment to machine tool manufacture.

7. As the attached Annex shows, comparability of statistical reporting is also a problem in the case of light manufacturing products such as footwear and wool textiles. The USSR definition of shoes includes not only all leather shoes but shoes whose uppers are made of combination leather and textiles. It probably includes athletic shoes and sneakers, but is believed to exclude rubber and felt footwear. The more limited US definition includes leather, play, and athletic shoes, but excludes tennis shoes, sneakers, slippers, and rubber footwear. The Soviet definition is broad enough to include a variety of leathers and leather substitutes not generally acceptable to US purchasers. Soviet production of 315 million pairs

in 1957, nevertheless fell well below the 529 million pairs produced in the US. Although Soviet production grew at 5.8 per cent per year from 1952 to 1958, more than twice the 1.9 per cent increase of the US output in the same period, it must be noted that Soviet production represents a quantity which the State is willing to allocate to its population whereas the lower US growth rate reflects the efforts of US manufacturers to meet the demands of the US population, whose needs in the past have been so adequately met that little repressed demand can be said to exist in the US. Moreover, the Soviet effort to "catch up with the West" represents an effort to match US production in quantity at the expense of probable further sacrifices in quality and with no significant improvement in the present unattractive styles or limited choice of models. Mere numbers produced are therefore not a good comparison of the shoe production of the two countries. Neither would selling price of the shoes produced, since price is artificially established in the USSR. To achieve a measure of true comparability it would be necessary to value the Soviet output in US terms.

3. A similar situation exists in the production of wool cloth. The width of Soviet cloth is not officially reported but is believed to average only 42 inches as compared with the US practice of reporting wool cloth on a 54 inch minimum width basis. Moreover, Soviet practice defines as wool for statistical purposes, material with less than 50 per cent wool content. It is believed that most wool cloth contains less than 100 per cent wool content and that the

wool substitutes used generally consist of materials such as cotton or rayon that lower the quality of the finished product. In contrast since 1951, US statistics include only fabric containing at least 51 per cent or more of wool. In the US the addition of wool-like synthetic fibers to improve the quality of the final product is spreading rapidly. Nevertheless, climatic differences and differences in indoor heating practices and changes in US consumer preferences make it understandable that the demand for wool textiles in the USSR may exceed that of the US and may well result in the USSR overtaking the US in wool fabric production. Again, as in the case of the production of footwear, mere numbers, without reference to quality, are not an adequate measure of the respective outputs of the two countries.

Comparability of Soviet and US Data on Footwear.**Production of Footwear**

(millions of pairs)

	<u>1950</u>	<u>1951</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1965</u>
USSR	203	240	258	274	290	315	356	515
US	465	n.a.	473	517	521	529	n.a.	n.a.

Average Annual Rates of Growth

	<u>1952-58</u>	<u>1959-65</u>
USSR	5.8	5.5
US 1951-57	1.9*	n.a.

Soviet definition -- USSR production comprises shoes of all leather, combination leather uppers, and textile uppers; probably includes athletic shoes and "sneakers" but excludes rubber and felt footwear.

US definition -- US production comprises leather including play shoes and athletic shoes but excludes tennis shoes and sneakers; excludes slippers and rubber footwear.

Comments: Comparison of Soviet footwear statistics with US statistics requires careful evaluation of the differences in definition as given above. The USSR intends to "catch up with the West" in footwear in numbers only; in order to reach this goal further sacrifices in quality are planned.

Materials utilized in the Soviet industry, in addition to quality leather, include pigskin, goat skin, and various non-leather substitutes. Artificial leather is to be used extensively in achievement of 1965 goal. Of total leather footwear (produced by the Ministry) is

1955, about 80% were constructed with uppers of natural leather; the remainder had uppers of textile and combination materials. Quality often does not warrant shoe repair. Styles are unattractive, choice limited, and workmanship crude.

Comparability of Soviet and U.S. Data on Wool Cloth

Production of Wool Cloth								
(millions of linear meters)								
	<u>1950</u>	<u>1951</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1965</u>
USSR	155	176	243	251	268	282	303	500
US	423	n.a.	262	293	300	267	n.a.	n.a.

Average Annual Rates of Growth

		<u>1952-58</u>	<u>1959-65</u>
USSR		8.1	7.6
US	Production declined		n.a.

Soviet definition -- Wool cloth is reported in linear meters in the USSR. The width is not officially given; however, a reliable economist studying the USSR reports the average width to be 42 inches.

No explicit information is available regarding quality of the various types of wool included in Soviet reported totals. Industry data for 1955 show that very small percentages (6% and less) of wool cloth for clothing is 100% wool. It is probable that cloth with only small percentages of wool are counted as wool cloth and that the bulk of output of wool cloth has high rate of blend. Observation of clothing available for purchase in USSR supports this estimate.

High quality wool substitutes are not available for blending, therefore the blending materials available, cotton and rayon, lowers the

overall quality of the product.

US definition -- US statistics comprise fabrics containing 51% or more of wool. Years 1950 and earlier included all fabric containing 25% or more wool. US wool cloth is reported on the basis of 54 inch width (minimum). Therefore, a linear meter of wool cloth in the US is at least 12 inches wider than in the USSR.

Comments: Because of differences in width in data reported and in the quality of wool fabrics, Soviet and US data can not be considered comparable. In addition, consumer preference for the high quality wool substitutes (Orlon, Dacron, etc.) has resulted in reduced output of wool cloth in the US. Since the USSR has no comparable wool substitutes the production of wool cloth probably will continue to increase. In 1956 in the US, production of fabrics of wool-like synthetic fiber was about equal to production of wool cloth, which reflects increasing consumer preference for synthetics. In addition, Soviet comparisons with US production also overlook the fact that the US imports sizeable quantities of wool cloth. In 1957, US imports of wool cloth were double imports of wool cloth by the USSR.